

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2005/050721

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04J3/08 H04L12/46

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04J H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 259 837 B1 (DE BOER EVERT ET AL) 10 July 2001 (2001-07-10)	1-3, 6, 8, 15, 17, 20-23 9, 10
Y	abstract figure 4 column 2, line 8 - line 56 column 3, line 8 - line 61	
A	US 2003/031124 A1 (CHOW TIMOTHY Y ET AL) 13 February 2003 (2003-02-13) abstract	1
Y	EP 0 961 518 A (ALCATEL CANADA INC) 1 December 1999 (1999-12-01) abstract paragraph '0011!	9
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

Z document member of the same patent family

Date of the actual completion of the International search

29 April 2005

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06/05/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2200 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Bernardini, A

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	US 6 181 677 B1 (VALLI RON ET AL) 30 January 2001 (2001-01-30) abstract column 1, line 64 - column 2, line 42	10
A	US 2003/086368 A1 (LIMAYE PRADEEP SHRIKRISHNA ET AL) 8 May 2003 (2003-05-08) abstract paragraphs '0021!, '0101!, '0104! figure 2	1-23
A	US 2003/012129 A1 (LEE BYOUNG-JOON ET AL) 16 January 2003 (2003-01-16) abstract paragraphs '0007! - '0015! figures 1,9	1-23
A	WO 03/047187 A (MARCONI COMMUNICATIONS SPA; LAZZERI, FRANCESCO; CAVIGLIA, DIEGO; FIASC) 5 June 2003 (2003-06-05) abstract	1-23
A	EP 0 221 360 A (INTERNATIONAL BUSINESS MACHINES CORPORATION) 13 May 1987 (1987-05-13) abstract page 3, line 29 - line 48 page 7, line 18 - line 27	1

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information on patent family members

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